# GOVERNMENT OF INDIA MINISTRY OF CIVIL AVIATION (COMMISSION OF RAILWAY SAFETY)

Office of the Commissioner of Railway Safety, Eastern Circle, 14, Strand Road (12th

Floor),

Kolkata - 700001.

No. Dated:

17.08.2011 To The Chief Commissioner of Railway Safety,

Ashok Marg, Lucknow - 226 001.

Sir.

Sub: Preliminary narrative report on derailment of 12510 Dn Guwahati – Bangalore Express between Km 279/10–279/7 in Gour Malda – Jamirghata Double line non electrified section of MLDT division of E.Rly and its subsequent collision by 53027 Up Azimganj – Malda Town Passenger train at about 19.05 hrs on 31.07.2011.

## **INTRODUCTION**

### 1.1 Preamble

In accordance with Rule 3 of the 'Statutory Investigation into Railway Accidents Rules, 1998, issued by the Ministry of Civil Aviation, Government of India, I hereby submit a brief Preliminary narrative Report of my Statutory Inquiry in respect of the Derailment of 12510 Dn Guwahati — Bangalore Express between Km 279/10 — 279/7 in Gour Malda — Jamirghata Double line non electrified section of MLDT division of E.Rly and its subsequent collision by 53027 Up Azimganj — Malda Town Passenger train at about19.05 hours on 31.07.2011

# 1.2 Inspection and Inquiry -

- 1.2.1 On 31.07.2011, I received a call on my mobile phone from CSO/E.Rly at 19.35 hrs. On seeing the call log at 20.00 hrs, I immediately rang him. He responded stating that there was an accident of the Bangalore Guwahati Express over Malda division in MLDT-AZ section in which a passenger train is also involved. He told that he was at Sainthia accompanying AM (Signal) Rly Board who was there for inspection. He mentioned that he was leaving for the site by the f<sup>t</sup> available train. As he did not have any information in regard to injury / casualty, I requested him to inform me the details as soon as are known to him.
- 1.2.2 At 20.30 hrs, CCRS spoke to me and shared his information about the accident which he came to know through TV news. During that period, I was out to some place to attend to some personal work.
- 1.2.3 As I did not get any feed back from CSO by then, I rang DRM/MLDT on his mobile phone at 21.23 hrs but received no response. I sent an SMS to him at 21.30 hrs as under.
  - "I wish to know injury/casualty details. Urgent CRS/EC"

- 1.2.4 At 21.45 hrs, I rang ADRM/MLDT on his mobile phone but got no response. At 21.46 hrs, I rang Sr. DSO/MLDT on his mobile but got no reply.
- 1.2.5 CSO/ER's call was received at 21.48 hrs when he informed of 03 casualties as was known to him from MLDT control. He mentioned that he could not so far contact any officer at site.
- 1.2.6 I spoke to GM/ERly on his mobile phone at 22.01 hrs. He was on way to the accident site. He mentioned about injury to 07 persons and also stated that there was an information about a dead body lying near the site of the derailed locomotive. It was not clear whether it could be a passenger of the train or any outsider.
- 1.2.7 At 22.05 hrs, I spoke to CPTM/ERly and requested him for arranging my visit to the site ex Howrah by about 24.00 hrs on date.
- 1.2.8 At 22.07 hrs, CCRS again spoke. He was informed of my programme of leaving for the site of accident on that night.
- 1.2.9 At 22.16 hrs, I sent following message to DRM/MLDT.
  "I intend to conduct inquiry into the accident. Please ensure preservation of clues/evidence CRS/EC"

  The same message was forwarded to CSO/ER also at 22.19 hrs. Thereafter, CSO spoke to me and we discussed about my further programme.
- 1.2.10 I left Howrah at about 23.50 hrs along with Dy CE (Safety)/ERly by Light goods Special for the site of accident, reaching there at about 5.00 hrs on 1.8.2011. In the meantime, GM/ERly had already arrived at the site with PCE/CSO and other PHODs/HODs at 2.20 hrs on 01.08.2011 DRM/MLDT with ADRM, CMS and Branch Officers/doctors were present at the site since 20.30 hrs of 31.07.2011.
- 1.2.11 I inspected the site of accident on 01.08.2011 with DRM, CSO, PCE, CE(TMC), CMPE, Sr.DEN (Cord), other concerning officers from about 6.15 hrs till about 14.30 hrs and saw restoration work in progress under the guidance of GM/ERly. At the site, I also met with CHD, CSC, CRSE and CCE/ERly.
- 1.2.12 During the inspection of site, I shared my concern with PCE as well as GM for sudden subsidence of the bank and need for detail investigation to arrive at the cause of such sudden failure. I had stressed proper corrective measures for the rehabilitation of bank in the section before normal speed of traffic is restored. In the intervening period, running of trains with speed restriction may be considered. I brought to their notice identical case of subsidence of bank in Pasraha Gauchhari section of Sonpur Division in ECRly where the railway administration had decided to close the affected line for taking necessary corrective measures to improve the bank conditions.
- 1.2.13 While tackling the accident involved locomotives of the trains, it was noted with deep sense of sorrow that a dead body was found trapped underneath the locomotive.
- 1.2.14 During the site inspection, it was observed that there was subsidence of bank under the Dn track between Km 279/9 279/10 to a length of about 14.3m, width of 1.65m from the left edge of the PSC sleepers towards the track and depth of about 1.0 meter. Total 08 coaches of 12510 Dn had derailed and its locomotive after

derailment was infringing the Dn track and got hit by the train engine of 53027 Up which was coming on the Up line. The collision resulted in front SLR of 53027 Up mounting on its engine and 03 of its adjacent coaches getting derailed.

While at the site, I intimated CSO of my intention to conduct inquiry into the accident on 02.08.2011 and 03.08.2011 at Malda and requested him to arrange necessary press notification in this regard. He was also advised to arrange written information to local DM and SP about programme of my statutory enquiry. CSO was also advised to arrange for required witnesses and make other necessary arrangement.

- 1.2.15 In the afternoon, I along with CSO / E.Rly left for Malda at about 14.30 hrs by road. We went to the Divisional Railway Hospital, Malda at about 17.00 hrs, where injured passengers were admitted for treatment. Dr. (Mrs) Raha, Sr. DMO with other doctors conducted our visit through wards of the hospital where injured passengers/train crew were admitted. There were in total 23 accident victims admitted out of whom 02 were having grievous injury and rest 21 had sustained simple injury. 06 amongst them were shifted from local civil hospital to Divisional Railway Hospital for better monitoring and treatment. I interacted with each individual injured person and enquired about condition of their health. They were found in good shape, most of them keen to get discharged. They also expressed satisfaction for the good care taken by railway in giving them proper treatment. CMS/MLDT who was at site with CHD/ERly subsequently joined us.
- 1.2.16 As advised, Railway arranged to publish Press Notification in leading News papers of Kolkata (in English, Hindi and Bengali) about holding of my statutory inquiry from 10 hours on 02.08.2011 and 03.08.2011 at Divisional Railway Manager, Malda town's Meeting room inviting members of public, having knowledge relating to the accident and matter connected therewith to appear and tender evidence at the inquiry or to write to my office address at 14 Strand Road, 12<sup>th</sup> floor, Kolkata 700 001.
- 1.2.17 As per the schedule programme for holding enquiry, I commenced my enquiry proceeding at 10.00 hrs on 02.08.20111. Following senior railway officers were present during the enquiry.
  - i) Sri D.N.Jha, CSO, E.Railway.
  - ii) Sri A.Dutta, CMPE, E.Railway.
  - iii) Sri J. S.Chauhan, CCE, E.Railway.
  - iv) Sri Sanjay Mishra, CTPM, E.Railway.
  - v) Sri Rajneesh Gupta, ADRM/Malda.E.Railway.

Divisional officers were called in the inquiry, as and when required. DRM/MLDT was engaged in restoration work at site.

- 1.2.18 The enquiry on 02.08.2011 continued till about 19.30 hrs. 09 no. of railway witnesses submitted their statement and were interrogated. No passenger or any member of public or police/civil authority appeared in the enquiry or produced any evidence.
- 1.2.19 Due to the sudden subsidence of the bank without giving any prewarning which prima facie resulted in the said accident, I felt a grave safety risk in running a train for public carriage of passenger at full sectional speed of 100 kmph in the affected block section until the cause for such major subsidence of the bank is established and remedial measures are taken thereon. Accordingly, I under the power conferred on me vide rule no. 1.02 (4) of Indian Government Railways General Rules 1976 prescribed special approved instructions on 2.8.11 vide no MCA/234/605/H dated 2.8.11 to restrict the sectional speed between

Gour Malda – Jamirghata section (4.82 km) of Malda division of Eastern Railway to 30 kmph on Down line and 65 kmph on Up line subject to close surveillance of the section through regular inspection /patrolling for which methodology would be decided by the competent railway administration and imposing further restriction required due to the site conditions. Similar course of action in regard to treatment of vulnerable embankment was suggested for adjoining sections also.

It was stipulated that PCE/E.Rly may restore the sectional speed to its original of 100 kmph after pinpointing the cause of the subsidence of the bank in the section, taking requisite remedial measures thereof and satisfying himself of safety in train operation at speed authorized by him.

- 1.2.20 The enquiry proceeding on 03.08.2011 also began at 10.00 hrs as scheduled. Following senior railway officers were present during the enquiry.
  - i) Sri D.N.Jha, CSO, E.Railway.
  - ii) Sri Harsh Kumar, DRM/Malda.
  - iii) Sri A.Dutta, CMPE, E.Railway.
  - iv) Sri J.S.Chauhan, CCE, E.Railway.
  - v) Sri Sanjay Mishra, CTPM,E.Railway.
  - vi) Sri A.K.Gupta, CRSE, E.Railway.
  - vii) Sri Atul Nigam, CE(TMC), E.Railway.
  - viii) Sri Rajneesh Gupta, ADRM/Malda, E.Railway.

Divisional officers were called in the enquiry as and when required.

- 1.2.21 The enquiry on 03.08.2011 continued till about 19.00 hrs, 17 no. of railway witnesses submitted their statement and 07 were interrogated. No passenger or any member of public police/civil authority appeared in the enquiry or produced any evidence.
- 1.2.22 I returned back to Kolkata by 13154 Dn Gaur Express which left MLDT at 22.20 hrs on 03.08.2011. During my return journey, I had conducted foot plate inspection alongwith CSO, CMPE and CCE/ERly from MLDT to New Farakka station to know the condition at the site of accident. It was noted that a speed restriction of 30 kmph was imposed in the Gour Malda-Jamirghata block section and a further 10 kmph speed restriction was prescribed from km 279/09 to 279/07 in the section, which was the site of condition.

## 1.3 **Preservation of clues**

- 1.3.1 Sr. Supervisors of MLDT division prepared a Joint Note describing the site of accident, weather condition, alignment of track at the site of accident, condition of derailed coaches/locomotives, measurement of unaffected portion of the track etc.
- 1.3.2 Sketch of the site of accident was jointly prepared by the concerned Branch officers of the division.
- 1.3.3 Railway Administration had taken still photographs as well as video photos of the site of accident which included subsided bank, damaged track, derailed locomotives and coaches etc.
- 1.3.4 Memory chips from Speed recorder of both the locomotives were retrieved and print out of the speed recording was taken and produced during the enquiry to know the speed of the trains before the accident.
- 1.3.5 Memory Cards from Micro processer based Control System (MBCS) of both the locomotives were also taken out and print out of the event recording was taken and copy handed over to me.

- 1.3.6 Print out of event recording by Data loggers at both the stations of the affected block section, viz Gour Malda and Jamirghata was taken and produced before me during the enquiry.
- 1.3.7 Breathanalyser test was conducted on Engine crew of both the trains. The guard of 12510 Dn was also done breathanalyser test. Blood samples were taken from each of them and sent for alcohol screening test.
- 1.3.8 The affected embankment and track on both the lines were available undisturbed for my inspection when I reached the site on 01.08.2011 morning. Accident involved locomotives and coaches of both the trains were also available at site for my inspection.

## 1.4 Description of the accident.

1.4.1 12510 Dn Guwahati - Bangalore Express comprising of 24 coaches worked by Diesel Loco no. 16411 WDM 3A/Andal under the charge of loco pilot Sri P.K.Ghosh, assistant Loco pilot Sri A.J.Pathak and Guard Sri S.K..Zaman, all headquartered at Howrah while running through Gour Malda-Jamirghata block section of Malda division of Eastern Railway on Dn line at a speed of about 77 kmph derailed by its Train engine and front 08 coaches between km 279/10 and km 279/7 due to subsidence of about 14 m length of embankment. The train engine after derailment got tilted and stopped infringing the Up line. In the meantime, 53027 Up Azimganj-Malda Town passenger comprising of 09 coaches worked by loco no. 16089 WDM3A/BWN under the charge of loco pilot sri Mukesh kumar, assistant Loco Pilot Sri Santosh kumar and Guard Sri Sanjay kumar Singh, all headquartered at Malda running on Up line at a speed of about 53 kmph collided with the Train engine of 12510 Dn which was lying infringing the Up line. As a result, train engine of 53027 Up got derailed suffering extensive damage, its front SLR mounted on the train engine and 03 of its adjacent coaches also derailed. The train engine of 12510 Dn also got heavily damaged.

The front 03 coaches of 12510 Dn after derailment ran away from the track by about 14 meters to 2.5 meters whereas 03 following coaches were standing tilted away from the track by about 1 m to 1.5m. The 7<sup>th</sup> coach was derailed by the side of the track with both the trollies having got worked out and buried under the ballast. The 8<sup>th</sup> coach was derailed only by its HWH end trolley wheels only.

1.5 **The nature of weather** – The weather at the time of accident was fair. However, during the day it rained for about an hour.

#### 1.6 Casualties

I regret to report that 02 dead bodies both male: one aged about 22-25 years and other aged about 15 years were found from the site of accident. While the former was seen on 31.07.11 night itself lying near the accident involved engine, the later was found underneath the locos at about 13.00 hrs on 01.08.2011 when the locos were being thrown away with the help of 140T BD crane. None of them could be identified so far and there had been no claimant also. The dead bodies were kept in morgue at Civil Hospital, Malda. Besides , 30 passengers including train crew members suffered injury out of whom 02 passengers sustained grievous injury and rest 28 had simple injury. 07 were released after first aid from the site itself. 23 were admitted in Divisional Railway Hospital, Malda for treatment and observation.

# 1.7 Passenger occupancy:-

i) 12510 Dn: There were 22 Passenger Coaching Vehicles (PCVs) in the train out of which 17 were reserved coaches and were fully booked to capacity. The occupancy in the train has been reported to be as under:

- a) Reserved coaches (17 no) 1166 no
- b) Unreserved coaches (4 no) 350 no & Pantry car TOTAL - 1516 no
- ii) 53027 Up There were 09 unreserved coaches making the train consist. Being Sunday, the train was having very lean occupation and occupancy has been reported to be about 100 no

## II INTIMATION AND RELIEF MEASURES

#### 2.1 **Intimation**

- 2.1.1 The 1<sup>st</sup> information about the accident was received by MLDT control at 19.17 hrs on 31.07.11 from Sri Manoj Mondal, on duty ASM/JMQ who intimated that 12510 Dn might have got derailed in the section between GZM JMQ which he confirmed at 19.23 hrs.
- 2.1.2 DRM/MLDT was informed about the accident at 19.24 hrs. Branch officers were simultaneously informed by respective controllers.
- 2.1.3 Sri S.K.Jana, TI/emergency, HQ Control at Fairlie Place, Kolkata was intimated telephonically at 19.25 hrs. by MLDT control.
- 2.1.4 Besides, information of the accident was passed on to PHODs/HODs by respective BOs on CUG mobile phones.
- 2.1.5 Medical team of Malda and Sahebganj came to know of the accident when hooters for ordering ARMVs were blown at 19.25 hrs.
- 2.2 Movement of officers to control and to the site of accident.
- 2.2.1 DRM, Sr DEN(2), Sr DEE (G), Sr DFM, DME(P), DSTE, ACM immediately arrived in the control office after the accident. DRM, ADRM, Sr. DSO, Sr. DEN (Co-ordination), Sr. DSTE, Sr. DEE (G), Sr. DFM, DSTE, AME, ASC left for site of accident thereafter. CMS & Sr DMOs of Divisional Railway Hospital also proceeded for the site of accident.
- 2.2.2 Light Goods Special left Howrah at 21.10 hrs with GM, PCE, CCE, CSC,CE(TMC) etc. CSO and CMPE joined the Special train at Azimganj. The train arrived at the site of accident at 2.20 hrs on 01.08.2011.
- 2.2.3 Sr. DOM, AOM© and AOM(S) were at NFK station in connection with NI working for commissioning of END panel. They returned to MLDT control at 22.00 hrs.
- 2.3 Medical attention and Relief
- 2.3.1 ARMV, ART and 140 BD Crane were immediately ordered from MLDT and SBG. Details of their ordering and movement particulars are given as below.

MLDT	Γ base	SBG base			
ARMV	ART	ARMV	ART	140 T	
				BD	
				Crane	

i) Time of ordering ii)Time left base station	19.25 19.55	19.25 20.11	19.25 20.23	19.25 20.23	19.25 21.38
iii)Time arrived at site	20.30	21.38	14.15 (1.8.11)	14.15 (1.8.11)	0.40 (1.8.11)

Timings indicated above are of the date 31.07.11 except those for which date is written in bracket below.

Besides, 140T BD Crane of NJP/NFRly had arrived at site at 5.05 hrs on 1.8.2011 and was utilized for restoration work. ARMV/KIR arrived MLDT at 22.20 hrs on 31.7.2011, but was returned as not required. 140T BD Crane of Howrah arrived Jamirghata at 2.52 hrs on 1.8.2011 but was controlled there.

- 2.3.2 Medical team of Divisional Railway Hospital, Malda was comprising of i) Doctors 6 no, ii) Nurse 4 no, iii) Pharmacist 03 no, iv) Dresser 02 no, v) OS 1 no & vi) Hospital attendant and Safaiwalas 16 no. They attended to 13 injured passengers. One was discharged after giving First aid and 12 persons were taken to Divisional Rly Hospital by ARMV where they were admitted.
- 2.3.3 10 injured passengers directly reported to the Divisional Rly Hospital, MLDT out of whom 05 were discharged after First aid and remaining 05 were admitted.
- 2.3.4 07 injured passengers had gone to the District Hospital / MLDT. 01 was discharged after First aid and 06 were admitted who were subsequently shifted to Divisional Railway Hospital, Malda
- 2.3.5 There were total 30 injured passengers including 02 loco pilots, 02 Assistant Loco Pilots and 01 guard of the ill fated trains out of whom 02 were grievous. Both of them were travelling in Azimganj Malda Town passenger train. One was a railway staff whereas other was a general passenger.
- 2.3.6 Medical attention provided to the injured passengers is considered satisfactory.
- 2.3.7 No complain was received from any of the passengers in regard to lack of assistance or loss of belongings etc.
- 2.3.8 All the passengers of the ill fated trains were accommodated in unaffected 16 coaches of 12510 Dn extending help in shifting their luggages and taken to MLDT attached with ARMV/MLDT. At MLDT, stranded passengers of the train were provided with dinner packets and water bottles free of charge by the railway catering department. It was heartening to know that Merchant chamber of commerce/ Malda also came for help and provided water bottles and light refreshment to passengers. The rake of cancealed 13154 Dn Gour Express along with 16 unaffected coaches of 12510 Dn was utilized to form a 23 coach Special train for Bangalore which left with all the passengers at 3.35 hrs on 1.8.2011 via Katihar.
- 2.3.9 Assistance booth was opened by railway at MLDT station at 20.30 hrs for supplying round the clock information. 03 Telephones with no. 266818, 283444 and 1072 were installed.

2.3.10 Ex gratia payment:- 23 injured passengers who were admitted in the Divisional Railway Hospital were given ex gratia payment: @ Rs. 15,000/- each to grievously injured 02 passengers and @ Rs. 5000/- each to passengers with simple injury.

### 2.4 Restoration

- 2.4.1 Accident affected 04 coaches of 53027 Up passenger train were thrown off the track between 3.05 hrs and 4.45 hrs on 1.8.2011.
- 2.4.2 One ACCN Coach no. NF 03112 whose only one bogie was derailed was put on rail at 3.00 hrs on 1.8.11. Five derailed coaches were set aside clear of the track between 14.40 hrs, and 18.50 hrs on 1.8.2011. Two front coaches had already gone off the track by themselves and needed no attention.
- 2.4.3 Both the locos were made off the track at 13.45 hrs on 1.8.11.
- 2.4.4 The Up track at the site of accident was made fit at 16.25 hrs on 1.8.2011 with stop dead caution and a speed restriction (SR) of 10 kmph for 1st train and SR of 10 kmph for subsequent trains. The 1st train to pass was Up DC 16647 AMJ container which left JMQ at 21.18 hrs and passed GZM at 21.45hrs on 1.8.2011.

  The Dn track was made fit at the site of accident at 14.00 hrs on 2.8.2011 with stop dead caution and 10 kmph speed restriction for 1st train and 10 kmph SR for subsequent trains. The 1st train to pass the site was Dn DC 12174 BOYN (Empty) which left GZM at 16.10 hrs and passed JMQ at 16.49 hrs on 2.8.11.

## 2.5 Effects on train movement due to the accident.

Movement of a large no of trains got adversely affected due to the accident.

Details are furnished as below:

Train no of affected trains have been indicated.

On 31.07.11:-

Cancelled trains (M/Exp) - 3154, 2344, 2346, 3142, 3146, 3148, 3164,

5960, 3150

Trains short terminated - 3011 at RPH

Trains diverted - 3413 & 3415 via KIR-BJU, 2345, 3141, 5959 via

GMAN-

SBG-KEU-BJU-KIR, 4056 via BJU-KIR.

On 01.08.11:-

Cancelled trains (M/Exp) - 2343, 2377. 2517, 3149, 3153, 3163, 3409, 3410, 3421,

3466/3465, 23154, 2344, 2346, 2378, 3142, 3146,

3148,

3150, 3164, 3422

Trains short terminated - 3011 at RPH

Trains short originated - 3145 at NH, 3414/3413 - short terminated & short

originated

ex-BGP

Trains diverted - 3147, 4055, 5657, 5661, 5228, 5658, 5640 via KIR-BJU.

Re-scheduled - 5959, 2345

Passenger trains cancelled - 53027, 53028, 53401, 53402, 53003, 53004,

53417, 53418,

63429, 53430.

On 02.08.11:-

Cancelled trains (M/Exp) - 3149, 3163, 3409/3410, 3466/3465, 3150, 3422, 3164,

3154

Trains short terminated - 3011 at RPH, 53401 at BHW

Trains short originated - 3012 at RPH

Trains diverted - 4055 Re-scheduled - 5959, 5657

Passenger trains cancelled - 53402, 53003, 53004, 53418

On 03.08.11:-

Cancelled trains (M/Exp) - 3145, 3153, 3421, 53003, 3150

Trains short terminated - 3011 at RPH Trains short originated - 3012 at RPH

### III. TRAINS

3.1 Composition and marshalling order of the trains.

A) Train no 12510 Dn Guwahati – Bangalore Express

- 3.1.1 Locomotive
- 3.1.1.1 The Train 12510 Dn Guwahati-Bangalore Express was being worked by loco no. 16411 WDM3A, based at Andal Diesel Loco Shed of Eastern Railway. The loco was working in short hood leading position.
- 3.1.1.2 Schedule particulars of the locomotive:-

Mid life Rebuilding at DCW/ Patiala - 13.08.2009

Commissioning at Andal after rebuilding - 21.08.2009

M16 - 28.04.2011 M 2 - 30.06.2011 T 2 - 08.07.2011

3.1.1.3 Brake system available in the locomotive:

IRAB – 1 pure Air Brake system, D1 Emergency brake valves (2 no), Dynamic brake and Hand brake. All were reported to be in working order by the diesel shed Andal as checked during T2 schedule on 08.07.2011.

3.1.1.4 Safety fittings:

The locomotive was fitted with requisite safety fittings viz Auto Flasher Light, Twin beam head lights, Classification lights, Horns, Cattle guards, rail guards etc. All were in working order as confirmed by the Diesel shed Andal. There was no adverse booking by driver of the train in this regard.

3.1.1.5 Speed Indicator cum Recorder:-

The loco was provided with LAXVAN Hyderabad make, Speed Indicator cum Recorder having 90 days memory card. Its last calibration was done on 28.4.2011 during M 16schedule at Diesel shed Andal. The driver of the train had confirmed that the speed Indicator cum Recorder of his loco was in working order.

## 3.1.1.6 VCD:

VCD was incorporated in Micro processor based control system of the locomotive and was in working order as per checking done during T2 schedule on 08.07.11 at Andal Diesel Shed.

## 3.1.1.7 ACD:

The loco was provided with ACD and it was properly functioning as per checking done during T2 schedule on 8.7.11.

3.1.1.8 Length and weight of loco

Length - 17.120 m

Weight - 112.8 T

3.1.2 Coaches

3.1.2.1 The trailing load of the train was comprising of 24 coaches.

3.1.2.2 The marshalling order of the train and schedule particulars of the coaches were as under:-

Sl.	Coach	Make	Mfg.	Last POH	Return	Schedule d	lone place/da	nte
No.	no.		Year	workshop	date to workshop	A	В	IOH
from				/date	workshop			
T/Eng 1.	SC/VPH	RCF	2004	LGDS	01/13	GHY		
1.	04827	KCI	2004	18.06.11	01/13	30.07.11		
2.	SW/VPH	RCF	2000	RCF	08/11	GHY		SRP
	009835			03/09		09.07.11		12.10.10
3.	NF/SLR	BEML	1998	DBWS	12/12	NGC		
	98718			04.05.11		03.06.11		
4.	NF/GSCN	ICF	2002	NBQS	10/11	GHY 09.06.11	GHY	DBRG
	02214			25.03.10			14.05.11	19.01.11
5.	NF/GSCN 03210	RCF	2003	DBWS	10/11	GHY 25.05.11	GHY 25.05.11	DBRG 23.01.11
	NF/GSCN	ICF	2005	18.03.10	10/10		23.03.11	23.01.11
6.	05280	ICF	2005	DBWS 19.03.11	10/12	NGC 03.06.11		
7.	NF/WCB	ICF	1996	DBWS	11/12	NGC		
<i>'</i> .	9926	ICI	1770	23.04.11	11/12	28.05.11		
8.	NF/ACCN	RCF	2003	NBQS	10/12	GHY	GHY	
O.	03112	Rei	2003	12.03.11	10/12	10.06.11	10.06.11	
9.	NF/ACCW	ICF	2001	DBWS	01/12	NGC	GHY	GHY
	01052			11.06.10		05.06.11	25.04.11	25.04.11
								Extd
								07/11
10.	NF/ACC	RCF	2005	DBWS	02/12	GHY		DBWS
	N 05114 NF/ACCN	D.C.E.	2005	07.07.10	02/12	05.07.11		28.05.11
11.	05129	RCF	2005	NBQS 13.07.10	02/12	GHY 21.07.11		DBWS 01.06.11
12.	NF/ACCN	RCF	1998	DBWS	10/11	GHY	GHY	DBWS
12.	98101	KCF	1990	08.03.10	10/11	13.07.11	06.05.11	01.02.11
13.	NF/GSCN	RCF	1997	NBQS	01/12	GHY	00.03.11	NBQ
13.	8821	KCI	1557	12.06.10	01/12	12.07.11		15.04.11
14.	NF/GSCN	BEML	2008	NBQS	03/12	NBQ	NBQ	NBQ
	08202			29.07.10		07.07.11	07.07.11	07.07.11
15.	NF/GSCN	BEML	2007	NBQS	01/13			
	07247			24.06.11				
16.	NF/GSCN	RCF	2002	DBWS	01/12	NGC		DBRG
	02201			15.06.10		03.06.11		01.05.11
17.	NF/GSCN	RCF	2000	DBWS	10/11	NGC	NGC	NBQ
	00212			10.03.10		18.07.11	18.07.11	11.01.11
18.	NF/GSCN	BEML	2007	NBQS	01/13	NGC		
10	07231	D. G.D.	1000	26.05.11	0.1/1.2	07.07.11		DDD.6
19.	NF/GSCN	RCF	1998	DBWS	04/12			DBRG
20	98244	D.C.E.	1000	31.08.10	0.4/1.0			14.07.11
20.	NF/GSCN	RCF	1998	DBWS	04/12			NBQ

	98260			15.09.10				24.07.11
21.	NF/GSCN	ICF	2003	NBQS	04/12			NBQ
	03240			20.09.10				27.07.11
22.	NF/GS	ICF	2008	DBWS	11/11	GHY	NGC	DBRG
	08409			06.04.10		24.06.11	10.05.11	26.01.11
23.	NF/GS	BEML	2010	BEML	05/12	NBQ	NBQ	NBQ
	10458			06-10		30.06.11	30.06.11	30.06.11
24.	NF/SLRD	RCF	2009	RCF 1-10	01/12	NGC	GHY	GHY
	09716					7.07.11	02.06.11	17.01.11

Front 08 coaches were derailed in the accident.

## 3.1.2.3 Brake system available in the coaches:

The coaches were provided with graduated release air brake system 20 coaches were having bogie mounted brake system and 04 coaches had under frame mounted brake system.

- 3.1.2.4 The rake of the train is based for primary maintenance at Guwahati and the secondary maintenance is done at Bengaluru. The rake had undergone last trip inspection on 30.7.11 at Guwahati before working 12510 Dn. It was reported that all the safety fittings in the coaches were available.
- 3.1.2.5 Length and weight of the train (excluding the train engine)

Length – 535.2 meters

Weight - 985tonnes

B) Train no. 53027 Up Azimganj – Malda Town passenger.

#### 3.1.3 Locomotive

- 3.1.3.1 The train 53027 Up Azimganj-Malda Town passenger was being worked by loco no. 16089 WDM3based at Burdwan diesel Loco shed of Eastern Railway. The loco was working in longhood leading position.
- 3.1.3.2 Schedule particulars of the locomotive:

Mid life Rebuilding at DCW, Patiala – 22.06.2005.

M 48 - 24.7.2009 M 20 - 23.5.2011 M 2 - 23.7.2011

3.1.3.3 Brake system available in the locomotive:

IRAB – 1 pure Air Brake system, D1 Emergency brake valves (2 no), Dynamic brake and

Hand brake. All were reported to be in working order by the diesel shed Burdwan as checked during M2 schedule on 23.07.2011.

### 3.1.3.4 Safety fittings:

The locomotive was fitted with requisite safety fittings viz Auto Flasher Light, Twin beam head lights, Classification lights, Horns, Cattle guards, rail guards etc. All were in working order as confirmed by the Diesel shed Burdwan. There was no adverse booking by driver of the train in this regard.

## 3.1.3.5 Speed Indicator cum Recorder:-

The loco was fitted with Medha Make Speed Indicator cum Recorder having 90 days memory chip. Its last calibration was done on 23.05.2011 during M20 schedule. The speed indicator cum recorder was reported to be in working order.

3.1.3.6 VCD:

VCD was incorporated in Micro processor based control system of the locomotive and was in working order as per checking done during M2 schedule on 23.07.11 at Burdwan Diesel Shed.

## 3.1.3.7 ACD:

The loco was provided with ACD and it was properly functioning as per checking done during M2 schedule on 23.7.2011

3.1.3.8 Length and weight of loco

Length - 17.120 m

Weight - 112.8 T

#### 3.1.4 Coaches

- 3.1.4.1 The trailing load of the train was comprising of 09 coaches.
- 3.1.4.2 The marshalling order of the train and schedule particulars of the coaches were as under:-

Sl. No.	Coach	Make	Mfg.	Last POH	Return	Schedule done place/date		te
from T/Eng	no.		Year	workshop	date to workshop	IOH	A	В
	EDGGI D	DEM	11/01	/date	•		22.07.11	
1.	ERGSLR	BEML	11/91	LLH	01/13		22.07.11	
	91734			22.6.11				
2.	ERGS	RCF	11/92	KGPW	09/12		02.07.11	31.05.11
	92576			03.02.11				
3.	ERGS	BEML	10/87	LLH	10/12		22.07.11	
	87482			14.06.11				
4.	ERGS	RCF	08/92	LLH	08/11	LLH	02.07.11	07.05.11
	92483			30.12.09		02.11.10		
5.	ERGS	BEML	10/87	LLH	12/11	LLH	30.07.11	28.06.11
	87471			29.04.10		12.03.11		
6.	ERGS	RCF	01/89	LLH	12/12		18.07.11	
	89404			10.05.11				
7.	ERGS	RCF	06/03	LLH	01/13		18.07.11	
	03401			16.06.11				
8.	ERGSCZ	RCF	05/93	LLH	03/12	LLH	29.07.11	
	93627			06.08.10		30.05.11		
9.	ERGSLR	BEML	02/89	LLH	10/11	LLH	30.07.11	20.04.11
	89703			03.03.10		20.01.11		

Front 04 coaches were derailed in the accident.

3.1.4.3Brake system available in the coaches:

The coaches were provided with graduated release air brake system. All coaches were having bogie mounted brake system.

- 3.1.4.4 The rake of the train is based for primary maintenance at Jheel Siding at Howrah. The rake had undergone last trip examination at Jheel siding on 30.07.11. It worked HWH-AZ / AZ-KWAE-AZ pas senger trains before working 53027 Up ex Azimganj.
- 3.1.4.5 Length and weight of the train (excluding the train engine).

Length - 200.8m

Weight – 349.7 Tonnes.

## 3.2 Brake power of the trains

- 3.2.1 Both the trains were provided with Air Brake system and all of their brake cylinders were fully functional with 100% brake power.
- 3.2.2 The brake power certificate (BPC)for train no. 12510 Dn was issued at Guwahati on 31.7.2010 vide no.GHY/12510 Dn/11/198 indicating 100% brake power.

The BPC for train no 53027 Up was vide no. 046533 issued on 30.7.2011 at Howrah on round trip basis. The brake power was indicated to be 100%.

## 3.3 Damages and disposition

- 3.3.1 Damage to locomotives
- 3.3.1.1 Loco no 16411 WDM3A working 12510 Dn:

The loco was heavily damaged both in its superstructure and underframe including engine, auxiliary equipments, electrical machines, control equipments etc. It was declared beyond economical repair. The cost of damage was estimated to be of the order of Rs. 3.5 crores.

3.3.1.2 Loco no 16089 WDM3A working 53027 Up:

Both the truck assemblies of the loco were badly damaged, so was the long side buffer beam. Major damage in power pack and other auxiliary equipments was also apprehended. The approximate cost of damage was estimated to be Rs. 80 lakh.

3.3.1.3 Both the locomotives were removed clear of the track with the help of 2 no 140T BD cranes and kept by the side of the Up line embankment.

#### 3.3.2 Damage to coaches

#### 3.3.2.1 Coaches of 12510 Dn

- i) SC VPH 04827 was lying by the side of the rail track (Dn line) at a distance of about 12.3m with both the trolleys buried under the earth.
- ii) SW VPH 09835 was lying by the side of the rail track (Dn line) at a distance of about 9.15m with both the trolleys buried under the earth.
- iii) NF SLR 98718 was lying by the side of the rail track (Dn line) in derailed and tilted condition at a distance of about 3.5m with both the trolleys buried under the earth.
- iv) NF GSCN 02214 was lying by the side of the rail track (Dn line) at a distance of about 1.5m with both the trolleys buried under the earth in worked out condition.
- v) NF GSCN 03210 was lying by the side of the rail track (Dn line) at a distance of about 1m with both the trolleys in worked out condition and buried under the ballast. All the brake gear fittings were in damaged condition.
- vi) NF GSCN 05280 was lying by the side of the rail track (Dn line) at a distance of about 1m and both the trolleys in worked out condition and buried under the ballast. All the brake gear fittings were in damaged condition.
- vii)NF WCB 9926 was found in derailed condition just beside the track with both the trolleys in worked out condition and buried under the ballast. All the brake gear fittings were in damaged condition.
- viii) NF ACCN 03112 HWH end Trolley was in derailed condition and NJP Trolley was on the Rail.

#### 3.3.2.2 Coaches of 53027 Up

- i) ER GSLR 91734 Shell portion mounted over the Engine of the train and both the Trolleys worked out from the coach. All components of the trolley were found in scattered and damaged condition. Side walls were broken into several pieces. SLR doors were broken and fallen on the ground.
- ii) ER GS 92576 NJP End Trolley was derailed but HWH end Trolley was on the Rail. End Panel of NJP side was bent and both the Trolleys were worked out and in fully damaged condition.
- iii) ERGS 87482 HWH end Buffer was in entangled condition with the adjacent coach and coach was found in inverted'V' shape due to bending of the coach under frame and body from the middle door.
- iv) ER GS 92483 NJP side Buffer was in entangled condition with HWH end GS Coach and NJP End, end wall was found in bent condition but all the wheels of the coach were on the rail.

### 3.3.3 Derailed coaches were disposed off as under:

- 04 affected coaches of 53027 Up were made off the track between 3.05 hrs and 4.45 hrs of 1.8.2011.
- 02 VPH coaches of 12510 Dn which were in the front had gone far away from the track and did not warrant any action. The 8<sup>th</sup> coach NF ACCN 03112 whose HWH end trolley was only derailed was rerailed at 3.00 hrs on 1.8.2011. Remaining 05 derailed coaches were made off the track between 14.40 hrs and 18.50 hrs on 1.08.2011.

## 3.3.4 Damage to Permanent way.

Dn line track: Rails, sleepers, fittings and one side cess for a length of 180 m.

Embankment for a length of about 20 meter.

Up line track: Rails, sleepers and fittings for a length of 100 m.

### 3.3.5 Damage to S&T equipments: Nil

## 3.3.6 Cost of damage:

Following was the cost of damage estimated by the Eastern Railway.

a) Locomotives -Rs. 4.30 Cr b) Coaches -Rs. 3.35 Cr c) Permanent way -Rs 0.20 Cr

d) S&T equipments - Nil

Total - Rs. 7.85 Cr

### IV. LOCAL CONDITIONS

- 4.1 The section and the site:-
- 4.1.1 The derailment of 12510 Dn took place on Down line between km 279/10-279/7 in Gour Malda Jamirghata Broad Gauge double line non electrified section of MLDT division of ERly. The derailed train engine had stopped in tilted condition infringing Up line and was hit by 53027 Up which was coming from opposite direction on Up line. The site falls in the Civil District of Malda of West Bengal state.
- 4.1.2 The Dn line was old and opened for public carriage of goods and passenger traffic in the year 1962 whereas the Up line was relatively new, opened in the year 1993.
- 4.1.3 The average height of the bank at the site of accident was 4.2 meter and the slope of the unslipped bank nearby was ranging from 2.6H: 1V to 4.6H: 1V
- 4.1.4 There was thick growth of vegetation on the slope of the bank as well as on cess.
- 4.1.5 A pathway for movement of bullock cart/tractor etc was made by the local people by cutting into the toe of bank to a height of about 0.50m
- 4.1.6 Ponds were available by the side of the pathway at a distance of 5-7m from the cut toe of the bank. The water level in the pond was about 1.5m below ground level (GL) and the depth of pond was stated to be about 1.5-2.0m. The ponds were in use by the local people for fish cultivation.
- 4.1.7 The Up track was at a distance of 4.8m from the Down track and running parallel.
- 4.1.8 Beyond Jamirghata (km 278.050) towards the site of accident between km 279.467 and km 279.666 there is a left hand curve of 2degree starting from km 278.66 and ending at km 279.090. Beyond this the track is straight and level. From the exit point of the curve, the distance of the locomotive of 12510 Dn which was lying infringing the up track was more than 400 meter.
- 4.1.9 The track in the section was comprising of 52 kg rails laid on PSC sleepers with sleeper density of M+7 and average ballast cushion of 250mm.
- 4.1.10 Near about 40.0m from the site of bank subsidence, there is a manned level crossing gate no 58/C/2E.
- 4.1.11 The site of accident was not under the vulnerable locations or identified section of the division for monsoon night patrolling.
- 4.2 Signalling and System of working.

Jamirghata and Gour Malda, both are B class stations with standard III interlocking. The signals provided are Multiple Aspect Colour Light (LED lit) getting operated from Panel having provision of Data Logger. Trains are worked on Absolute Block system. BPACs are provided on either end of the sections.

- 4.3 Kilometerage of stations/ locations:
- 4.3.1 Kilometerages are reckoned from Bandel.
- 4.3.2 The kilometerages of stations of affected block sections are

Gour Malda: Km 283.84 Jamirghata: Km 278.05

- 4.3.3 The site of accident was between km 279/10-7. i.e. km 279.666 and km 279.467
- 4.4 Maximum permissible sectional speed and local restriction.

4.4.1 The maximum cum booked speed of the trains in the section is 100 kmph. There is no permanent speed restriction and for the illfated trains, there was no temporary speed restriction or caution in the section.

### 4.5 Headquarters and jurisdiction:

Track – DEN-I/MLDT, AEN/MLDT, JE (Pway) IC/MLDT, JE (Pway)/Chamagram S&T – ASTE/MLDT, SSE (Signal)/MLDT, JE(Signal)/MLDT Control office is located at Divisional office/MLDT.

### V. SALIENT FEATURES

- 5.1 On 31.07.2011, 12510 Dn Guwahati Bangalore Express before the accident had stopped at Gour Malda station (GJM) at 18.58 hrs for line clear and departed at 18.59 hrs on proper signals. ASM/GJM informed ASM/JMQ at 19.01 hrs regarding the train entering the block section. The train derailed by its train engine and 08 front coaches at about 19.05 hrs due to bank subsidence between km 279/10 and 279/9.
- 5.2 Just before12510 Dn, Tr no. 17823/17976 DC, BOBYN (Empty) PKR which had arrived Gour Malda at 17.05 left at 18.36 hrs and working on Dn line arrived Jamirghata station at 18.58 hrs. The driver of the train during his interrogation had stated that the speed of his train in the section was about 45 kmph and he did not experience any jerk or abnormality in the section. His co driver and guard during cross examination also corroborated that they did not experience any jerk or abnormality during run in the section. However, co driver told the speed to be 40 kmph.
- 5.2.1 The Goods train took 22 minutes to cover a distance of 4.82 km (the inter distance between GJM & JMQ) i.e. it travelled about 1 km every 4.5 minutes. Since the accident spot is about 1.5 km from Jamirghata station, it can be reasonably concluded that the goods train had passed the location of bank subsidence between 18.50 18.55 hrs. It may thus be seen that the track and the embankment was ok about 15' before the accident of 12510 Dn.
- The embankment under the Dn track had all of a sudden sank while 12510 Dn was passing. The subsidence was found to be of length 14.3m, width 1.65m from the left edge of the PSC sleeper towards the right rail and depth of nearly 1.0m between km 279/10-9.The left rail in this portion of the track was hanging without any support. The last coach no NF 01052 ACCW (9<sup>th</sup> from T/E) which had not derailed was standing on this portion of the track.
- 5.4 The driver of 12510 Dn while passing the spot experienced a sudden severe jerk and his loco tilted towards left when he was thrown towards left side of the cab. Suddenly his loco turned towards right after which he felt an impact due to which he got himself banged against his Control panel desk. His Assistant driver grabbed him to save from injury. His loco came to stop. After a while he felt a second impact which was due to train engine of 53027 Up dashing against his engine. From the circumstances, it appears the engine crew did not get a chance to apply brake after the sudden jerk.
- 5.5 53027 Up Azimganj Malda Town passenger had arrived JMQ at 19.01 hrs and left at 19.03 hrs. ASM/JMQ informed ASM/GJM at 19.05 hrs regarding the train entering the block section JMQ-GJM. The train while on its run on Up line towards Gour Malda collided with the Train engine of 12510 Dn which was lying infringing the Up track.
- 5.6 At the time of accident, the weather was fair. There was no rain. It was a normal night.

Driver of 53027 Up during his interrogation had stated that his loco was working in long hood and in night 'under head light' on a straight track, the visibility could be about 500m. The driver in his deposition had stated that he felt impaired visibility due to smoke like situation and at that point of time it was twilight which itself hinders visibility as compared to day light or total darkness.

As per Joint visibility observations done by Sr Supervisors of MLDT division on 2.8.11night, visibility at the site of accident was reported to be of 195 meter for the loco crew working in long hood.

As per record of Micro Processer based control system (MBCS) of the loco, the speed of the train 53027 Up at the time of collision was 53 kmph and about 195 meter before, it was 44 kmph.

The emergency braking distance (EBD) worked out by the railway for the train for the affected section was 168m at a speed of 50 kmph and 136m at a speed of 45 kmph.

As per visibility check and EBD trial done by me along with CSO, CMPE, Sr DEN (Co-ord), MLDT on 16.8.11 night, the general visibility under head light of loco in long hood was noted to be more than 200-250m when the nature of weather was rainy. The EBD of a rake of 09 coach composition in empty condition was found to be about 110 meter. The circumstantial evidence indicates that the train crew of 53027 Up had adequate time to control his train short of the infringing loco on the Up line, had he been more careful in exercising his judgement in applying emergency brake on face of the obstruction on his track.

- 5.7 As per record of MBCS of the loco of 12510 Dn, the speed of the train at the time of derailment was 77 kmph. The speed recorder indicated maximum speed to be 79 kmph before the accident which became 2 kmph after 5 second and there was no recording thereafter.
- 5.8 The breathanalyser checks on the train engine crew of both the trains, done after the accident confirmed that they were free from any intoxication i.e. while driving they were normal self having full control of his train.

## VI PROVISIONAL FINDINGS

6. Having carefully considered all the evidence tendered, records produced, observations made during the site inspection and circumstantial evidence, I have come to the provisional conclusion that derailment of 12510 Dn Guwahati – Bangalore Express between km 279/10 – 279/7 in Gaur Malda – Jamirghata Double line non electrified section of Malda division of Eastern Railway was due to sudden subsidence of embankment under the Dn line caused as a result of formation failure. The subsequent collision of the derailed engine of 12510 Dn which was infringing the Up track by the 53027 Up passenger train was due to error in judgement by the loco pilot of 53027 Up to control the speed of the train on the face of obstruction on his track.

Accordingly, the accident is classified under i) Equipment failures – Failure of Permanent Way, and ii) Failure of Railway staff.

## VIIRECOMMENDATIONS

I make following immediate recommendations.

- 7.1 Since the failure of the bank was all of a sudden without any prewarning, it becomes a matter of serious concern and warrants indepth study to establish the cause of failure as well as to know required corrective and preventive measures. RDSO may be requested to deploy their expert team at Senior level for necessary consultancy in this regard.
- 7.2 Besides, an independent expert team from Institution of repute viz IIT/Roorkee, New Delhi etc may be requisitioned for detailed analysis of the site conditions to ascertain the deficiency which caused the bank failure and to suggest remedial measures.
- 7.3 In the intervening period, the behviour of the embankment not only in the GZM JMQ section but in the entire suspect sections of the railway should be kept under close watch during the monsoon by deployment of patrolmen judiciously.

- The suspect sections should be urgently identified if not already done and be reviewed by the Chief Track Engineer personally.
- 7.4 Monsoon night patrolling was noted to be not up to the requirements. There is an urgent need to put it on sound footing.
  The matter should be given due importance as it deserves for safety in train operation.
  Threadbare review at the level of DRM/ADRM every fortnight and at the level of Chief Track Engineer on monthly basis during monsoon is recommended.
- 7.5 In case of experiencing a situation which is indicative of any likely obstruction on a running line, the driver of the train must resort to most restrictive working to stop his train. Only after satisfying himself that the line is free from obstruction, he should restart his normal operation. All the loco pilots and loco inspectors should be counseled in this regard.
- 7.6 Timings indicated by Speed Recorder and MBCS of locomotive (16411 WDM3A/Andal) were found varying by more than 90 minutes. Such erratic timings lead to utter confusion while analysing data. Watches of Speed Recorder and MBCS of locomotives, both Diesel and Electric should be set with respect to the Railway's standard time (GR 4.01) at the time of every schedules being done at the base shed.
- 7.7 Data loggers provided at the panel of a station were also found logging time quite at variance with the station timing. A system for setting the timing of Data logger as per station timing should be evolved.

(R. P.Yadav) Commissioner of Railway Safety Eastern Circle, Kolkata

## PRESS NOTE

Shri R. P. Yadav, Commissioner of Railway Safety, Eastern Circle, Kolkata held a Statutory Inquiry into the "Derailment of 12510 Dn Guwahati – Bangalore Express between Km 279/10 – 279/7 in Gour Malda – Jamirghata Double line non electrified section of MLDT division of E.Rly and its subsequent collision by 53027 Up Azimganj – Malda Town Passenger train at about 19.05 hrs on 31.07.2011." As a result of the accident, no one was killed and 30 persons were injured, 02 out of them grievously.

According to the provisional findings of the Commissioner appended with his Preliminary Report, the accident occurred due to "i) Failure of Equipment (Permanent way) and ii) Failure of Railway Staff". These findings are under the consideration of the Government.

The Chief Commissioner of Railway Safety, Ashok Marg, Lucknow.

Sir,

Sub: Preliminary narrative report on Derailment of 12510 Dn Guwahati – Bangalore Express between Km 279/10 – 279/7 in Gour Malda – Jamirghata Double line non electrified section of MLDT division of E.Rly and its subsequent collision by 53027 Up Azimganj – Malda Town Passenger train at about 19.05 hrs on 31.07.2011.

In accordance with Rule 3 of The Statutory Investigations into Railway Accidents Rules 1998' published by the Ministry of Civil Aviation, I have the honour to submit a brief preliminary narrative report of my Statutory Inquiry into the above accident.

Yours faithfully,

(R. P. YADAV)

# Commissioner of Railway

Safety,

Eastern Circle, Kolkata

D.A. Preliminary Report & Press Note.

Copy forwarded for information to:-

- 1. Secretary (Safety), Railway Board, New Delhi.
- General Manager, Eastern Railway, Kolkata.
   Principal Information Officer, Press Information Bureau, Shastri Bhawan, Rajendra Prasad Road, New Delhi – 110 001.

(R. P. YADAV) Commissioner of Railway

Safety,

Eastern Circle, Kolkata

D.A. Preliminary Report & Press Note.